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Original Research Article

Organizational coordination and patient satisfaction: a structural analysis of healthcare quality in Durgapur, India

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ABSTRACT

Background: Healthcare organizations are complex systems that require effective coordination among departments and teams to deliver optimal patient care. Organizational coordination involves the intentional integration of activities and resources to achieve common goals. This study will explore the relationship between organizational coordination and patient satisfaction in a Durgapur, India healthcare facility, offering insights to enhance quality and improve patient experiences.
Methods: A cross-sectional survey was conducted rigorously at a tertiary hospital in Durgapur to investigate patient satisfaction. A robust sample of 167 patients was used for the data collection process, which was meticulously executed through a comprehensive questionnaire administered over a period of three months.
Results: The demographic analysis highlighted that 55.69% of respondents were male and 44.31% were female. Harman's single-factor test showed a total variance of 23.06%, indicating no significant common method bias. The measurement model assessment confirmed strong internal consistency (Cronbach's $\alpha>0.7$) and composite reliability (CR>0.7), along with satisfactory convergent and discriminant validity (AVE>0.5). The structural model demonstrated a good fit ($\chi^2/df=2.378$, GFI=0.944, CFI=0.949, AGFI=0.873, RMSEA=0.09). Most importantly, the relationship between organizational coordination and patient satisfaction was statistically significant ($\beta=0.209$, C.R.=6.815, $p<0.01$).
Conclusions: This study demonstrates that strong organizational coordination significantly boosts patient satisfaction in Durgapur's healthcare system. By integrating vital operational factors, our proposed model delivers a comprehensive framework designed to elevate care quality, enhance communication, and enrich the overall patient experience.

Keywords: Organizational coordination, Patient satisfaction, Cross-sectional survey, Structural equation modeling

INTRODUCTION

The evaluation of patient satisfaction is not just critical but also urgent for assessing healthcare quality and delivering patient-centred care. It plays a pivotal role in forecasting service utilization patterns by gauging healthcare users' satisfaction with their providers. Therefore, a thorough examination of patient satisfaction and its underlying factors is imperative, and there is a pressing need to uphold the quality of healthcare services. Effective healthcare coordination is central to achieving high levels of patient satisfaction, requiring the seamless integration of various healthcare services, departments, and professionals. This intricate orchestration of clinical and administrative processes ensures that patients receive timely, efficient, and holistic care, enhancing the patient experience, improving clinical outcomes, reducing waiting times, and optimizing resource utilization.

Research unequivocally demonstrates that effective organizational coordination is essential for the seamless integration of healthcare services, ensuring comprehensive and continuous patient care. The evidence strongly supports that well-coordinated healthcare systems significantly enhance patient satisfaction by reducing medical errors, shortening wait times, and improving overall care quality.[1] Care coordination is essential for meeting the treatment needs of patients. Poor coordination can lead to medical errors, while reasonable care coordination can minimize patient and family complaints.[2,3] The success of care coordination depends on easy access to information, continuity of information, a support system for accessing medical records, and the active involvement of service providers.[4] Unquestionably, patient satisfaction is correlated with several healthcare performance indicators, such as hospital finances and income, profitability, growth and patients' intent to return and willingness to recommend the hospital.[5-7] Patient satisfaction is a crucial metric for assessing the calibre of medical care and a vital aspect of system assessment. Nursing assistance is one of the many essential aspects affecting patient satisfaction. According to McCance, nursing support is the comprehensive care nurses give, including informational, emotional, and physical support.[8] It is essential for patients' general well-being and speed of recovery. Additionally, the registration process is also another factor that influences patient satisfaction. Patients' opinions of healthcare may suffer due to lengthy registration processes, which can cause irritation and anxiety.[9]

Numerous studies have consistently demonstrated that well-coordinated healthcare systems directly lead to higher levels of patient satisfaction. Due to the high level of speciality and complexity associated with hospital care, multiple agents must interact and coordinate while fulfilling various tasks and providing specialized knowledge to treat a single patient.[10] It also highlighted that individual employee characteristics like motivation or satisfaction impact patient satisfaction, but the attitudes and behaviours of hospital staff have a more significant overall impact. Because of these characteristics, the idea that organizational-level dimensions like organizational climate and patient satisfaction are related seems intuitively reasonable. In order to overcome these obstacles, Durgapur healthcare organizations must make a concerted effort to promote a culture of cooperation and continual development, as inadequate communication systems, resistance to change, and lack of integration across different departments can significantly hinder effective organizational coordination. A study has been designed to directly assess the impact of organizational coordination on patient satisfaction to improve the effectiveness of the Durgapur healthcare organization. This study measures organizational coordination using factors such as registration time taken (RTT), nursing support (NS), staff behaviour (SB), departmental coordination (DAC), and time of response in case of an emergency (TORE). On the other hand, patient satisfaction is measured by factors such as medical care (MC), doctor's counselling (DC), doctor's treatment (DT), and proper diagnosis (PD).

In healthcare, organizational coordination is essential for systematically arranging and managing healthcare processes and resources to ensure optimal patient care. Effective coordination among healthcare providers, departments, and administrative functions is crucial for enhancing patient outcomes, reducing errors, and improving overall patient satisfaction. This literature review rigorously examines the relationship between organizational coordination and patient satisfaction in healthcare settings, thoroughly analyzing dimensions such as communication, teamwork, information systems, and integrated care pathways. In managing complex healthcare systems, effective organizational coordination is crucial. Research unequivocally demonstrates that poor coordination can lead to fragmented care, increased medical errors, and decreased patient satisfaction.

Conversely, well-coordinated care is undeniably associated with improved clinical outcomes and higher patient satisfaction scores.[10] For instance, a study established that patients who perceived better communication among their healthcare providers reported significantly higher satisfaction levels.[11] The study includes communication during critical periods, which undeniably plays a crucial role in patient outcomes. The study emphasized mutual respect, shared goals, and effective communication in fostering a positive patient experience. Patients receiving care from well-coordinated teams reported significantly better experiences and satisfaction.[12]

A study illustrates that poor communication during patient handoffs can result in adverse events and dissatisfaction.[13] Conversely, enhanced communication channels, such as regular interdisciplinary meetings and standardized communication protocols, correlate with higher patient satisfaction.[14] The key to patient happiness is positive interaction between nurses and patients. They serve as primary contact points, explaining medical procedures, addressing concerns, and reassuring. Patient satisfaction is positively impacted by nurses' sympathetic and transparent communication, as demonstrated by McCabe's study.[15] Generally, patients report better experiences with healthcare when they feel that their nurses are paying attention to and understanding them.

On the other hand, departmental coordination within a healthcare facility is crucial for ensuring cohesive and comprehensive patient care. Effective collaboration and communication between various departments are non-negotiable in minimizing delays, reducing errors, and enhancing the overall patient experience. Research indicates poor coordination can lead to fragmented care, increased wait times, and patient dissatisfaction.[16] Effective departmental coordination is essential for ensuring cohesive and comprehensive patient care within

a healthcare facility. Different departments must collaborate and communicate efficiently to minimize delays, reduce errors, and enhance patient experience. Research unequivocally demonstrates that poor coordination can lead to fragmented care, increased wait times, and patient dissatisfaction.[16]

According to research, waiting times during registration can lead to patient dissatisfaction, anxiety, and frustration.[17] The registration process is the gateway to healthcare services, encompassing patient data collection, insurance verification, and scheduling. Efficient registration processes are crucial for reducing wait times and ensuring patient satisfaction. Quick and seamless registration processes significantly enhance the patient experience by reducing stress and ensuring timely access to medical care. Healthcare staff must promptly and attentively address patient needs and concerns to maintain high satisfaction levels. Timely responses to patient requests, questions, and emergencies are crucial. Research showed that patients who received timely and attentive care reported higher satisfaction levels.[18] Delays and perceived neglect can lead to frustration and dissatisfaction. A prompt response can significantly reduce the severity of medical conditions, prevent complications, and improve overall patient outcomes.[19] Conversely, any delays in response time can lead to adverse health outcomes, increased anxiety, and decreased patient satisfaction.[20] The literature indicates that organizational coordination may directly impact patient satisfaction. Therefore, we confidently formulate the following hypothesis:

H_1: Patient satisfaction is significantly influenced by organizational coordination.

METHODS

Conceptual model

A conceptual framework based on a literature review has been developed to investigate the relationship between organizational coordination and patient satisfaction (Figure 1).

Study design

This study employed a cross-sectional design.

Study place

The study was conducted in the Mission Hospital located in a selected healthcare facility in Durgapur. The hospital visits were specifically carried out over three months during weekends (January 2025 to March 2025), selected due to the high foot traffic. Data from the respondents was meticulously collected using a systematic sampling strategy with hospital intercepts, involving a random sampling of every tenth participant.

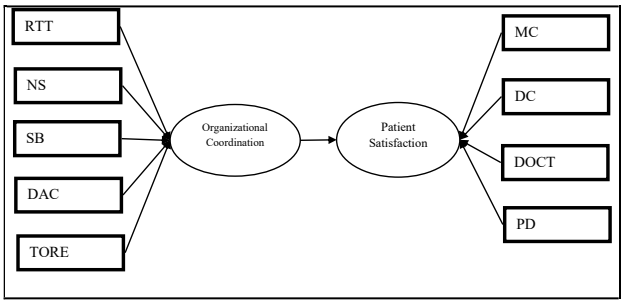

Figure 1. Proposed conceptual model.

Questionnaire development

A survey-based structured questionnaire employing a 5-point Likert scale was utilized to investigate the relationship between organisational coordination and patient satisfaction. The conceptual framework comprised two main constructs.

Measure

The study decisively commenced with exploratory factor analysis (EFA) followed by confirmatory factor analysis (CFA) to validate the EFA findings, confirm the factor structure, and rigorously evaluate the relationship between underlying latent constructs and observable variables based on formulated hypotheses. Furthermore, the study decisively employed structural equation modeling (SEM) using SPSS, AMOS, and SmartPLS to ensure a comprehensive and robust analysis.

RESULTS

The demographic distribution is shown in Table 1.

Table 1: Demography information.

Aspects	Classification	Frequency	%
Gender	Male	93	55.69
	Female	74	44.31
Total		167	100
Age (years)	18-30	32	19.16
	31-45	69	41.32
	46-60	66	39.52
Total		167	100

Sources: SPSS output.

Common method bias

A previous study emphasized the occurrence of common method bias (CMB) when measurements of relationships between different constructs are distorted due to using the same measurement method. This distortion can stem from respondents' tendencies to respond in a consistent or socially desirable manner. In this research, CMB is a concern when all data sets are collected using the same technique, potentially leading to inflated associations. To

address CMB, the single-factor Harman test was utilized, and the overall variance below 50% was considered negligible. Upon examination, the overall variance was found to be 23.06%, indicating the absence of common method bias in the study's data set.

Assessment of measurement model

The study assessed the internal validity, discriminant validity, and convergent validity of the multi-item constructs. Internal consistency was evaluated using Cronbach's alpha, and the value for each construct surpassed 0.7, indicating a high level of internal coherence. Therefore, the questionnaire's internal consistency was deemed highly reliable.[23] The composite reliability (CR) exceeded the criterion value of 0.7. Furthermore, all the standard factor loadings, ranging from 0.50 to 0.95, surpassed the 0.5 threshold, demonstrating a high degree of discriminating validity. Each factor loading was also higher than each cross-loading, indicating robust discriminant validity. In terms of discriminant validity, it was found that each construct exhibited higher cross-loadings and average extracted variance (AVE) >0.5 compared to the inter-item correlation. Additionally, the AVE values for every construct surpassed the standard value of 0.5, indicating convergent validity (Table 2). The study successfully met the conditions for convergent and discriminant validity.

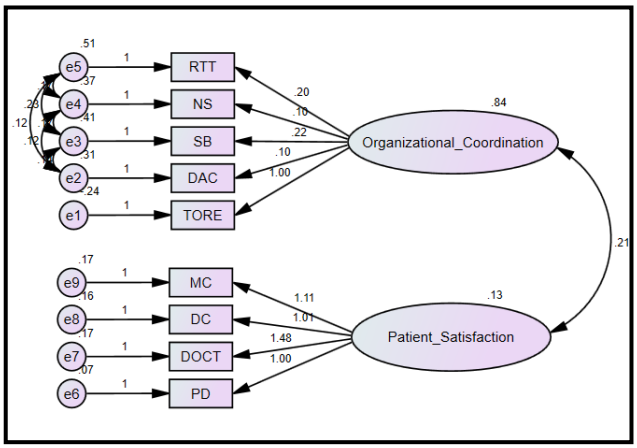

Figure 2: The structural model.

Table 2: Measurement of factor loading, construct validity and convergent validity.

Constructs	Standardized loadings factor	Cronbach alpha	CR	AVE	MSV
Organizational coordination					
RTT	0.692	0.763	0.84	0.51	0.30
NS	0.768	0.788			
SB	0.663	0.770			
DAC	0.775	0.788			
TORE	0.679	0.737			
Patient satisfaction					
MC	0.606	0.763	0.80	0.50	0.40
DC	0.778	0.768			
DOCT	0.693	0.750			
PD	0.740	0.767			

Note(s): AVE: Average variance extracted; CR: Composite reliability; MSV: Maximum shared variance; Sources: SPSS output.

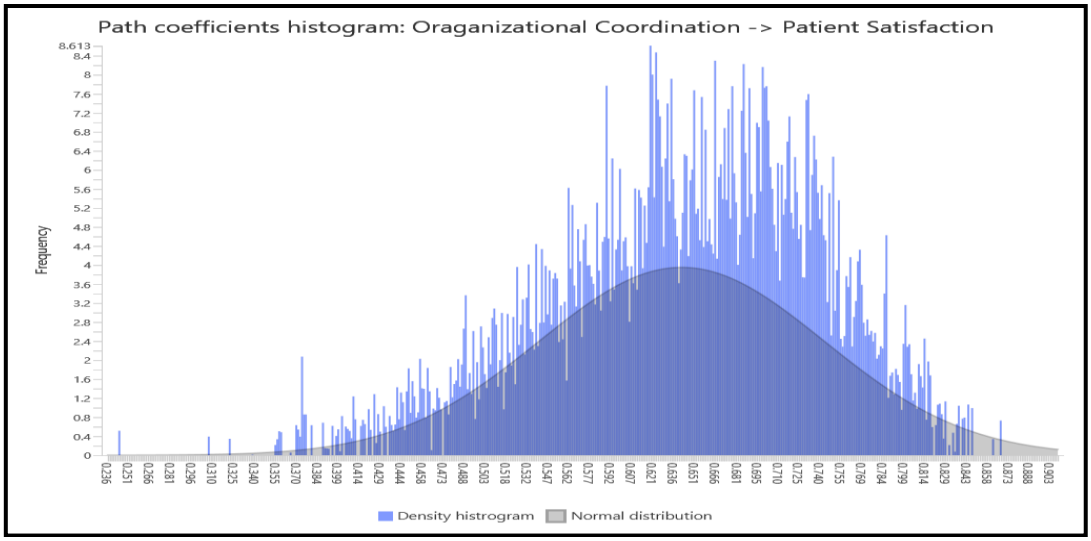

Figure 3: Path coefficient histogram.

SmartPLS output.

Table 3: Structural model coefficients.

Hypothesis effect			Estimate	S.E. (standard errors)	C.R. (critical ratios)	P	Hypothesis
Organizational coordination	⟷	Patient satisfaction	0.209	0.031	6.815	***	H_1 Supported

***Significant at the level of 0.01; Sources: SPSS-AMOS output

Assessment of structural model

A bootstrapping method was utilized to assess the explanatory power and significance of the paths in the structural models. The model estimation results are presented in Figure 2, revealing a significant path coefficient effect. The test findings are summarised in Table 3.

This study achieved an acceptable fit for the measurement model, with values of $\chi 2/df=2.378$; GFI=0.944; CFI=0.949; AGFI=0.873; and RMSEA=0.09, all meeting the measurement standards. Figure 3 shows the path coefficient histogram obtained from the structural model. This histogram displays the distribution of the coefficients for the relationships tested in the structural model. The path coefficient histogram shows that the majority of the path coefficients are positive. The distribution is skewed to the right, which indicates a strong positive relationship. These support the validity of the model and confirm that, overall, all the relationships between the constructs under study have been correctly captured and measured in the structural model.

DISCUSSION

The results demonstrate that healthcare providers must prioritize critical elements such as nurse assistance, emergency response times, staff attitudes, and admission processes. These factors are fundamental in shaping patients' perceptions of care quality.[20] To significantly enhance patient experiences, it is essential to deliver prompt and compassionate nursing care, eliminate delays in emergency services, foster positive staff-patient interactions, and streamline admission procedures.[21] Focusing on these areas will lead to improved satisfaction and outcomes for patients.[22] Despite potentially facing challenges in understanding complex treatments, they relied on their awareness when forming judgments about care quality and coordination. Patients strongly correlated their perception of coordination with their perception of the competence of healthcare providers, emphasizing the critical impact of coordination issues on their overall views about the quality of care. Moreover, the patients assertively communicated their expectations for active involvement in their care and the imperative need for systematic, organized, and seamless care coordination. Coordination, staff behaviour, the admission process, discharge procedures, and comprehensive follow-ups significantly contributed to patients' comfort. In summary, the research asserts the following observations about coordinated care: Patients assertively link their perception of coordination, especially coordination among doctors, with their perception of the competence of providers. Patients' satisfaction with the coordination of care is significantly influenced by the staff's behaviour from admission to discharge at healthcare organizations. Unexpected incidents and staff members' tardiness also have an impact on hospital patients' happiness. And the nursing staff is seen as the primary coordinator of care. Perhaps one of the most significant opportunities for improving care coordination lies in understanding care processes from the patient's perspective and facilitating effective staff and nurse behaviours across the diverse tasks involved in patient care. This can be achieved through organized communication, enhanced case management, clearer definitions of healthcare personnel roles, and the establishment of clear boundaries for patient care responsibility and accountability. By clearly communicating expectations and consequences to patients, we can elevate the delivery of quality healthcare and contribute to positive health outcomes. Additional research is imperative to investigate sociodemographic variables, such as marital status, occupation, education level, ethnicity, and religion, which are important because they can greatly impact patient satisfaction.[23] Ultimately, healthcare services should be tailored to varied patient populations and consider these aspects.

Limitations

This study has important limitations that need to be considered. Conducted in a specific geographic area (Durgapur), its findings may not apply to other regions. The sample size, while adequate for initial analysis, likely does not capture the diverse experiences of patients in various healthcare settings. Additionally, self-reported data may introduce bias, and key sociodemographic factors, such as marital status, occupation, education level, ethnicity, and religion, were not examined, despite their potential impact on patient satisfaction. Future research should address these variables and involve larger, more diverse samples to enhance the findings' relevance.

CONCLUSION

This study highlights the essential role of organizational coordination in enhancing patient satisfaction in healthcare settings. Factors such as timely nursing care, prompt emergency responses, and efficient admission and discharge processes significantly influence patients' perceptions of care quality. Well-coordinated care fosters trust in provider competence and engages patients in decision-making. By improving communication, clarifying staff roles, and embracing a patient-centered approach, healthcare organizations can advance care

quality and coordination. Tailoring services to meet diverse patient needs is crucial for achieving lasting improvements in satisfaction and outcomes.

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